



# City of Wilmington Pedestrian Safety Study

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Wilmington Pedestrian Audit

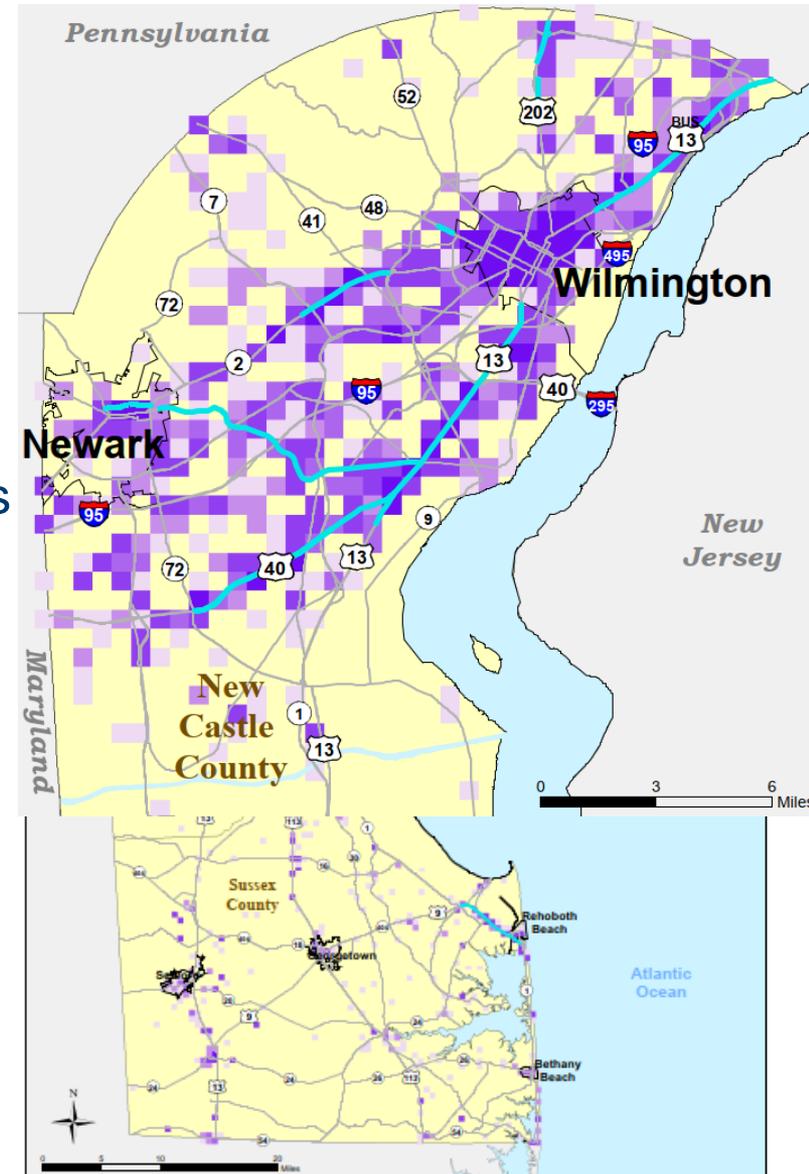
*Top 10 Intersections*

*July 14, 2023*



# Purpose of Study

- Why are we here?
  - Improve pedestrian safety within City
  - Improve walking as a mode of transportation
    - Access to jobs
    - Access to recreation
    - Access to economic improvements
  - Major corridors surrounding Wilmington have been studied
    - US 13
    - SR 141
    - US 202
    - Philadelphia Pike
  - Site selection conducted in 2019 pinpoints Wilmington as next logical study location



- Review city-wide pedestrian crash history
- Identify critical corridors and intersections
- Convene stakeholder group
- **Pedestrian safety audits of selected critical corridors and intersections**
- Systemic pedestrian treatments at other locations

## Stakeholder Group

- Peter Haag, DelDOT
- Sonya LaGrand, DelDOT
- Diane Gunn, Century, DelDOT Wilmington Projects Manager
- Paul Moser, DelDOT
- Meaghan Barna, DelDOT
- Aimee String, DelDOT
- Catherine Smith, DTC
- John Calnan, DTC
- Capt. Rodney Layfield, State Police
- Lt. Lance Skinner, State Police
- Richard Klepner, Office of Highway Safety
- Jackie McDermott, Office of Highway Safety
- Stephen Weber, City of Wilmington
- Tom Ogden, City of Wilmington
- Jeff Starkey, City of Wilmington
- Kelly Williams, City of Wilmington
- Sgt. Pete Leccia, Wilmington Police
- Dave Gula, WILMAPCO
- Federal Highway Administration

# TOP 10 INTERSECTIONS

# Top 10 Intersections

- King Street at 4<sup>th</sup> Street
  - See King Street presentation
- 4<sup>th</sup> Street at Franklin Street
  - See 4<sup>th</sup> Street presentation
- Walnut Street at 4<sup>th</sup> Street
  - See Walnut Street presentation
- 10<sup>th</sup> Street at Orange Street
  - Page 6
- 11<sup>th</sup> Street at Washington Street
  - Page 9
- Lancaster Avenue at Jackson Street
  - Page 12
- 4<sup>th</sup> Street at Rodney Street
  - See 4<sup>th</sup> Street presentation
- 4<sup>th</sup> Street at Monroe Street
  - See 4<sup>th</sup> Street presentation
- 8<sup>th</sup> Street at King Street
  - See King Street presentation
- Maryland Avenue / MLK Boulevard at Lancaster Avenue / Madison Street
  - Page 16

# 10<sup>th</sup> Street at Orange Street

- Orange Street is a one-way northbound road
- 10<sup>th</sup> Street is a two-way road
- NBR turn on red prohibited
- Intersection lighting adequate
- Wilmington Transit Corridors Project
  - Curb ramp and sidewalk improvements on SE corner of intersection

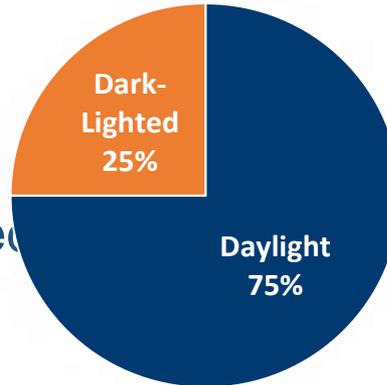


# 10<sup>th</sup> Street at Orange Street

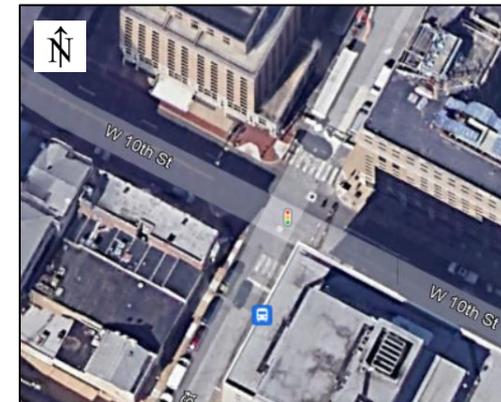
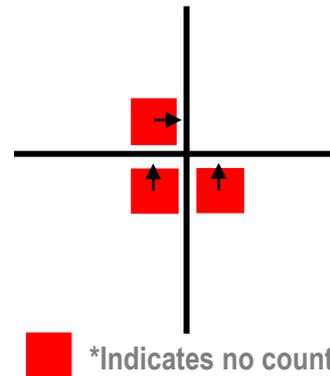
## 8 Crashes

- 4 crashes involving WB vehicles striking pedestrians (1 crossed at the south leg crosswalk, 1 crossed at the north leg crosswalk, 1 crossed midblock, and 1 crossed against the signal at the east leg crosswalk)
- 3 crashes involving NB left-turning vehicles striking pedestrians in the west leg crosswalk
- 1 crash involving a NB right-turning vehicle striking a pedestrian in the east leg crosswalk (FATAL)
  - Tuesday March 4, 2008, at 9:37 AM

Lighting Condition



- Observed pedestrians crossing against the signal on all legs
- East leg does not currently have crosswalk striping
- There are three existing ped heads that don't have countdowns
- Bus stop observed on south leg



## Recommendations

- Upgrade three existing pedestrian heads with no countdowns to include countdowns
- Install crosswalk striping on east leg of intersection
- Install TURNING VEHICLES YIELD TO PEDS signs (R10-15) adjacent to NB left-turn
- Consider Leading Pedestrian Interval (LPI) for west leg crosswalk



# 11<sup>th</sup> Street at Washington Street

- 11th Street is a one-way eastbound road
- Washington Street is a two-way road
- Intersection lighting adequate



## 14 Crashes

- 9 crashes involving EB left-turning vehicles striking pedestrians at the north leg crosswalk
- 2 crashes involving SB left-turning vehicles striking pedestrians at the east leg crosswalk
- 2 crashes involving EB vehicles striking pedestrians at the west leg crosswalk (1 crossed against the signal)
- 1 crash involving SB vehicle striking a pedestrian at the north leg crosswalk

- Little pedestrian activity observed during site visit
- All pedestrian signal heads had working countdown displays
- Bus stops observed on north and east legs
- EB red light camera
- Right hand side sign assembly crooked



## Recommendations

- Replace damaged sign structure at intersection
- Install TURNING VEHICLES YIELD TO PED signs (R10-15) where applicable
- Consider Leading Pedestrian Interval (LPI) for north leg crosswalk



# Lancaster Avenue at Jackson Street

- Lancaster Avenue is a one-way eastbound road
- Jackson Street is a one-way southbound road
- Intersection is currently staging area and along a detour route for the Wilmington Viaduct Project
- Intersection part of 2018 HEP Study, Site E
- Intersection lighting adequate



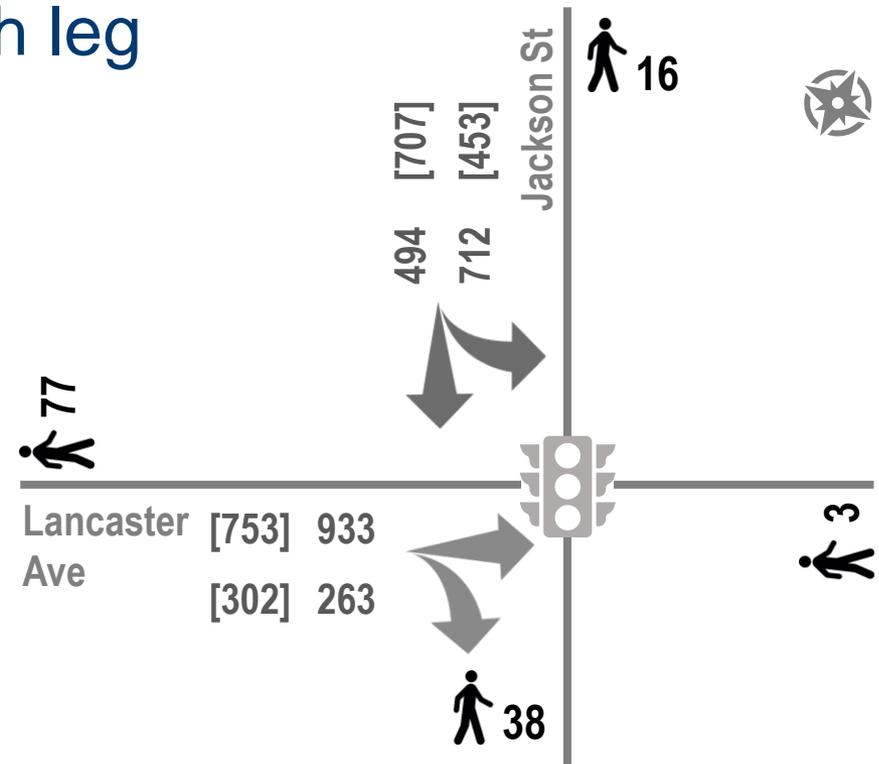
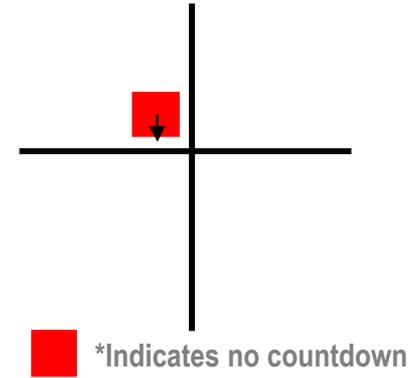
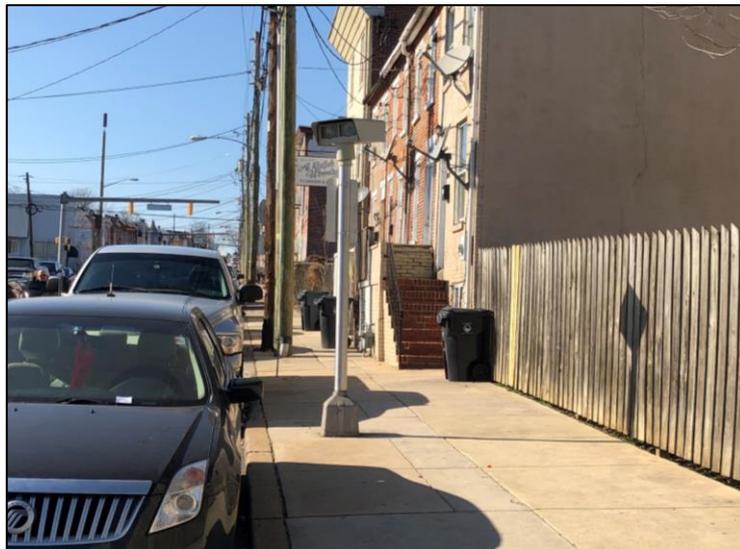
## 6 Crashes

- 3 crashes involving EB right-turning vehicles striking pedestrians in the crosswalk
- 2 crashes involving SB vehicles striking pedestrians in the crosswalk (1 FATAL)
  - Fatal accident occurred on Saturday, November 5, 2011, at 6:58 PM; witnesses claim pedestrian ran out trying to beat the traffic
- 1 crash involving EB vehicle striking pedestrian in the crosswalk



# Lancaster Avenue at Jackson Street

- No pedestrian crossing on the east leg
- There is one existing ped head that doesn't have countdowns
- Bus stop observed on north leg
- EB red light camera

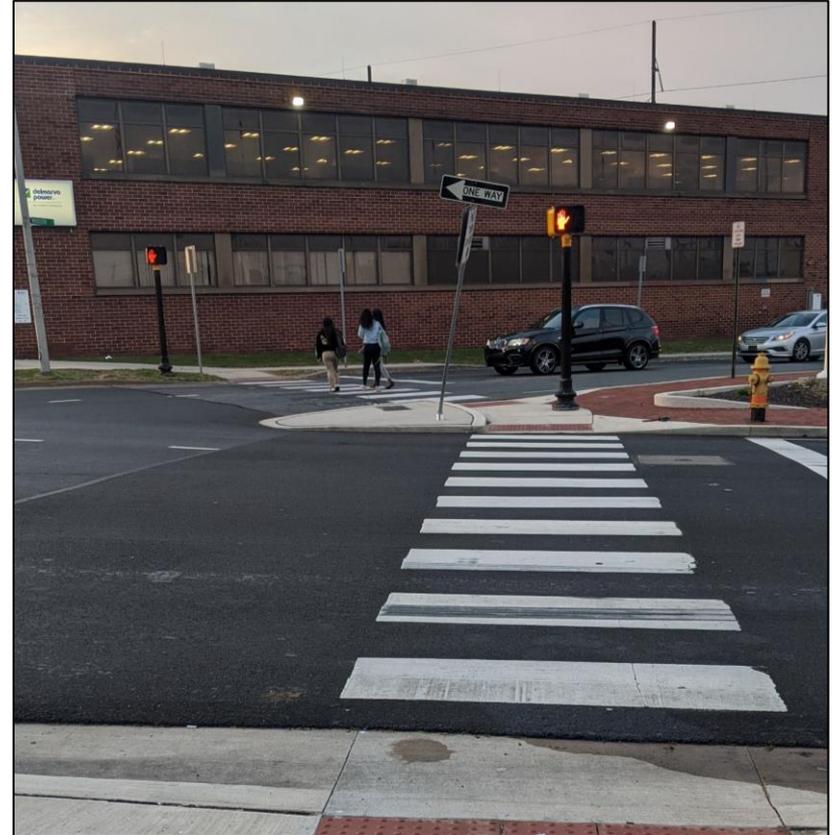


## Recommendations

- Upgrade existing pedestrian head with no countdowns to include countdowns
- Install TURNING VEHICLES YIELD TO PEDS (R10-15) adjacent to EB right-turn
- Per 2018 HEP, Site E study:
  - Install DO NOT ENTER (R5-1) sign (30"x30") on NW corner facing WB traffic
  - Replace DO NOT ENTER (R5-1) sign (30"x30") on SW corner facing WB traffic
  - Install crosswalks on the north leg (south leg crosswalk to be installed under contract #T201701401)
  - Refresh crosswalk on the west leg
  - Refresh turning tracks for SB Jackson Street
  - Install pedestrian countdown display on NW corner
  - Install pedestrian signal poles and countdown displays on SE and SW corners

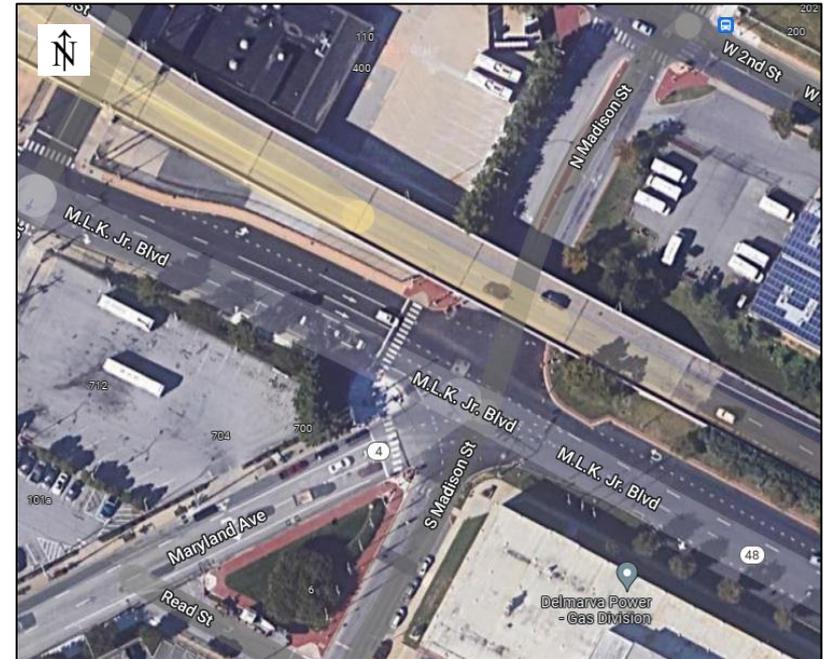


- MLK Boulevard is a one-way eastbound road
- Maryland Avenue is a one-way north eastbound road
- Madison Street is a two-way northbound/southbound road, at this intersection
- Intersection part of 2018 HEP Study, Site E
- Intersection is along a detour route for the Wilmington Viaduct Project
- Pedestrians were observed crossing against the signal
- Intersection lighting deficient



## 3 Crashes

- 1 crash involving a pedestrian walking in the NB lanes of Maryland Ave and being struck by a NB vehicle (FATAL)
  - Tuesday, May 13, 2008, at 6:44 AM
- 1 crash involving a vehicle striking a pedestrian in the crosswalk (other details unknown)
- 1 crash with unknown details and no witnesses

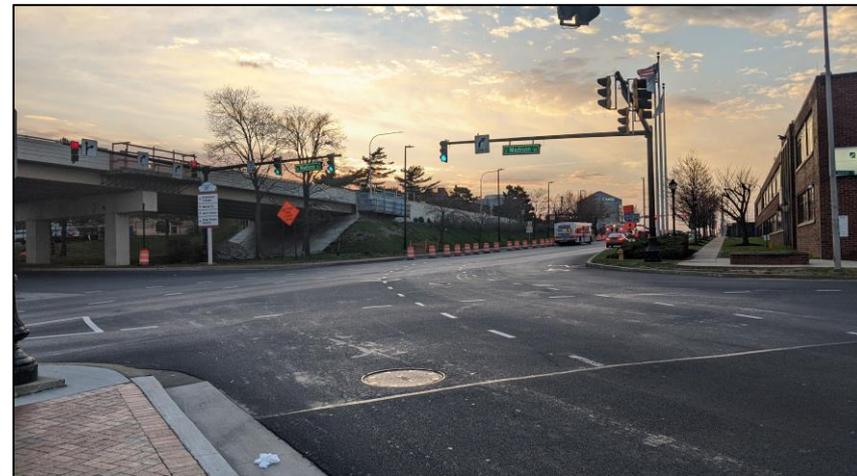


## Recommendations

- Consider lighting improvements on the north leg
- Install TURNING VEHICLES YIELD TO PED signs (R10-15) where applicable
- Per 2018 HEP, Site E study:
  - Upgrade existing pedestrian heads with no countdowns to include countdowns
  - Currently in design



2018 HEP  
Proposed  
Improvements





**Thank you!**

**Questions  
& Answers**

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